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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,001	02/04/2004	Yiu-Ming Leung	MSFT27	4082

			EXAMINER
27488	7590	07/03/2006	RUTLEDGE, AMELIA L

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ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/772,001	LEUNG, YIU-MING
	Examiner	Art Unit	
	Amelia Rutledge	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 February 2004</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/19/04; 6/9/06.*

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: original application, filed

02/04/2004; Information Disclosure Statements filed 08/19/2004 and 06/09/2006.

2.   Claims 1-19 are pending in the case. Claims 1, 10, and 15 are independent

claims.

Information Disclosure Statement

3.   The information disclosure statement filed 06/09/2006 fails to comply with 37

CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document;

each non-patent literature publication or that portion which caused it to be listed; and all

other information or that portion which caused it to be listed. It has been placed in the

application file, but the information referred to therein has not been considered. In this

case, the Information Disclosure Statement cites a beta release with system code,

however, a copy of the information has not been furnished with the IDS, also see the

Requirement for Information under 37 CFR 1.105, below.

Requirement for Information under 37 CFR 1.105

4.   Applicant and the assignee of this application are required under 37 CFR 1.105

to provide the following information that the examiner has determined is reasonably

necessary to the examination of this application.

5.   An issue of public use or on sale activity has been raised in this application. In

order for the examiner to properly consider patentability of the claimed invention under

35 U.S.C. 102(b), additional information regarding this issue is required as follows:

6.   the information disclosure statement filed 06/09/2006 cites a beta release of

Microsoft Office software which occurred in October 2002. Please provide copies of all

documentation supplied with the beta release and/or related to the release, such as web

pages and product manuals. A copy of the beta release is required. There is a

requirement for information describing the method of distribution of the release,

including a list of recipients of the beta release and a description of the method of

selection of recipients.

7.   Applicant is reminded that failure to fully reply to this requirement for information

will result in a holding of abandonment. The applicant is reminded that the reply to this

requirement must be made with candor and good faith under 37 CFR 1.56. Where the

applicant does not have or cannot readily obtain an item of required information, a

statement that the item is unknown or cannot be readily obtained may be accepted as a

complete reply to the requirement for that item.

8.   This requirement is an attachment of the enclosed Office action. A complete

reply to the enclosed Office action must include a complete reply to this requirement.

The time period for reply to this requirement coincides with the time period for reply to

the enclosed Office action.

Double Patenting

9.   A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

10.   Claims 1-10 and 15 are provisionally rejected under 35 U.S.C. 101 as claiming

the same invention as that of claim 1-10 and 16 of copending Application No.

10/805,896. This is a <u>provisional</u> double patenting rejection since the conflicting claims

have not in fact been patented.

Claim Rejections - 35 USC § 101

11.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12.   Claim s 1-19 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter.

In regard to independent claim 1, claim 1 cites: *A system for mapping payload*

data to spreadsheet lists, the system comprising:

a spreadsheet storage unit adapted to store spreadsheet data including at least

one spreadsheet list;

a payload data storage unit adapted to store payload data; and

a mapping unit adapted to receive spreadsheet data from said spreadsheet

storage unit, receive payload data from said payload data storage unit, and map said

payload data to said at least one spreadsheet list.

Claim 1 is directed to computer related nonstatutory subject matter, since although it

claims functional descriptive material in the form of the system for mapping payload

data to spreadsheet lists, comprising the claimed storage and mapping units, it is not

recorded on a computer readable medium. Rather, claim 1 is directed to software *per*

se, and is therefore not statutory. See *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at

1760 (claim to a data structure *per se* held non statutory).

In regard to dependent claims 2-9, claims 2-9 are rejected because they add

nothing to render the claimed subject matter statutory.

In regard to independent claim 10, claim 10 cites *A method for mapping*

payload data to spreadsheet lists, the methods comprising the steps of:

receiving spreadsheet data including at least one spreadsheet list, wherein said

at least one spreadsheet list includes at least one path associated with a field;

receiving payload data, wherein said payload data is associated with said

spreadsheet data; and

mapping said payload data to said at least one spreadsheet list by using said at

least one path.

Claim 10 is directed to computer related nonstatutory subject matter, because it claims

nonfunctional descriptive material, instead claiming abstract ideas for receiving and

mapping data and thus no requisite functionality is present to satisfy the practical

application requirement. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8.

In addition to being directed to nonfunctional descriptive material, the method of claim

10 is not recorded on a computer readable medium, and for this reason is also not

statutory since it is not capable of causing functional change in the computer.

In regard to dependent claims 11-14, claims 11-14 are rejected because they

add nothing to render the claimed subject matter statutory.

In regard to independent claim 15, claim 15 is directed toward the computer

readable medium comprising computer executable instructions for mapping payload

data to spreadsheets, for implementing the methods as claimed in independent claim

10. While claim 15 is recorded on a computer readable medium, claim 15 does not

claim a practical application and thus is directed toward nonfunctional descriptive

material. In practical terms, claims define nonstatutory processes if they simply

manipulate abstract ideas, e.g., a bid (*Schrader*, 22 F.3d at 293-94, 30 USPQ2d at

1458-59) or a bubble hierarchy (*Warmerdam*, 33 F.3d at 1360, 31 USPQ2d at 1759),

without some claimed practical application. In this case, the mapping of payload data to

a spreadsheet list by using a path associated with a field appears to lack a claimed

practical application, instead only claiming a mapping of data which appears to be a

manipulation of abstract ideas which would not meet the practical application

requirement.

In regard to dependent claims 16-19, claims 16-19 are rejected because they

add nothing to render the claimed subject matter statutory.

Claim Rejections - 35 USC § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14.   Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Shadmon et al. (hereinafter "Shadmon"), U.S. Patent No. 6,804,677 B2, issued

October 2004, in view of Jamshidi et al. (hereinafter "Jamshidi"), U.S. Patent No.

6,631,497 B1, issued October 2003.

In regard to independent claim 1, Shadmon teaches a system and methods of

indexing and mapping semi structured data, i.e., payload data to XML lists, by

determining paths from the root of the XML tree (Col. 9, l. 36-Col. 11, l. 27; Col. 16, l.

58-Col. 17, l. 36).   Shadmon teaches a storage unit adapted to store XML lists, and

Shadmon teaches a payload data storage unit adapted to store payload data and a

mapping unit, i.e., indexing unit, adapted to map the payload data to the XML list (Col.

17, l. 45-Col. 18, l. 60).   While Shadmon does not limit the method of mapping semi

structured data to XML lists to the mapping of spreadsheet data, Jamshidi teaches a

method of binding and importing data objects from different data sources to

spreadsheet data stored in XML format using a Graphical User Interface (Col. 2, l. 22-

60). Both Shadmon and Jamshidi teach mapping payload data to XML. It would have

been obvious to one of ordinary skill in the art at the time of the invention to combine the

method of importing data objects to spreadsheet data disclosed by Jamshidi, with the

methods of mapping semi structured data by determining paths from the root of the

XML tree rather than using a schema taught by Shadmon, since the indexing method

taught by Shadmon would allow the importing of semi structured data to the

spreadsheet without the requirement for a schema, thereby providing a desirable

improvement by allowing faster processing and search of the data, without requiring the

user to update a schema (Shadmon, Col. 8, l. 65-Col. 9, l. 16).

Regarding dependent claim 2, while Shadmon teaches the use of XML

lists, Jamshidi teaches that at least one spreadsheet list includes XML lists (Col. 4, l. 34

–Col. 5, l. 5; Col. 5, l. 37-Col. 6, l. 2). Both Shadmon and Jamshidi teach mapping

payload data to XML. It would have been obvious to one of ordinary skill in the art at

the time of the invention to combine the method of importing data objects to

spreadsheet data disclosed by Jamshidi, with the methods of mapping semi structured

data by determining paths from the root of the XML tree rather than using a schema

taught by Shadmon, since the indexing method taught by Shadmon would allow the

importing of semi structured data to the spreadsheet without the requirement for a

schema, thereby providing a desirable improvement by allowing faster processing and

search of the data, without requiring the user to update a schema (Shadmon, Col. 8, l.

65-Col. 9, l. 16).

Regarding dependent claims 3 and 4, while Shadmon teaches a network

interface adapted to receive a mapped XML list (Col. 27, l. 46-54), Shadmon does not

explicitly teach a user interface adapted to receive at least one mapped spreadsheet list

from the mapping unit and display the mapped spreadsheet list to a user. Jamshidi

teaches a user interface to receive at least one mapped spreadsheet list from the

mapping unit and to display the mapped spreadsheet to a user (Col. 3, I. 34-Col. 4, I.

21). Jamshidi also teaches a network interface for distributed data sources (Col. 2, I.

49-60). It would have been obvious to one of ordinary skill in the art at the time of the

invention to combine the method of importing data objects to spreadsheet data with the

graphical user interface and network interfaces disclosed by Jamshidi, with the methods

of mapping semi structured data by determining paths from the root of the XML tree

rather than using a schema taught by Shadmon, so that the user would have the benefit

of an easy to use graphical user interface not requiring extensive programming

experience.

Regarding dependent claims 5 and 6, Shadmon teaches that the indexing unit

determines at least one parent path from at least one field path associated with the

payload data, and designating a bottom path from the parent path where the bottom

path includes a longest path of the parent path (Col. 16, I. 58-Col. 17, I. 36; Col. 19, I.

41-Col. 20, I. 65), since Shadmon teaches the indexing of the semi structured data by

path, and that multiple path configurations can be designated and searched. In other

words, Shadmon teaches representing semi structured XML data as a tree, and

traversing the tree to determine a parent path and the longest path of the parent path,

thereby determining the leaves of the tree which are located at the ends of each longest

path, i.e., the bottom path, where the leaves represent the data items (Col. 20, I. 24-60;

Col. 24, I. 3-55).

Regarding dependent claims 7-9, while Shadmon teaches determining a

parent path and designating a bottom path thereby enabling extracting and indexing of

semi structured data, Shadmon does not explicitly teach designating at least one bind

node from the bottom path, however, Jamshidi teaches designating at least one bind

node from the full path, i.e., bottom or longest path (Col. 7, l. 20-32; Col. 6, l. 3-31).

While Shadmon does not explicitly teach mapping the bind node to a row in a

spreadsheet list, Jamshidi teaches mapping the bind node to a row in a spreadsheet list

(Col. 7, l. 20-32; Col. 6, l. 3-31), since Jamshidi teaches mapping a node to columns

and it would have been obvious that the data could also be mapped to spreadsheet

rows, since spreadsheets are composed of both rows and columns which are similarly

designated. Further, it would have been obvious that the indexing unit would obtain

values for a plurality of fields using the bottom path, since Jamshidi teaches mapping

the nodes to columns where the columns contain a plurality of fields, and Fig. 4 depicts

mapping a plurality of fields to a column.

Both Shadmon and Jamshidi teach mapping payload data to XML. It would have

been obvious to one of ordinary skill in the art at the time of the invention to combine the

method of importing data objects to spreadsheet data disclosed by Jamshidi, with the

methods of mapping semi structured data by determining paths from the root of the

XML tree rather than using a schema taught by Shadmon, since the indexing method

taught by Shadmon would allow the importing of semi structured data to the

spreadsheet without the requirement for a schema, thereby providing a desirable

improvement by allowing faster processing and search of the data, without requiring the user to update a schema (Shadmon, Col. 8, l. 65-Col. 9, l. 16).

In regard to independent claim 10, Shadmon teaches methods of indexing and mapping semi structured data, i.e., payload data to XML lists, by determining paths from the root of the XML tree (Col. 9, l. 36-Col. 11, l. 27; Col. 16, l. 58-Col. 17, l. 36). Shadmon teaches receiving payload data, i.e., XML semi structured data, and Shadmon teaches a method of indexing the payload data to an XML list (Col. 17, l. 45-Col. 18, l. 60). Shadmon teaches that the XML lists include at least one path associated with a data field (Col. 16, l. 58-Col. 17, l. 36). While Shadmon does not limit the method of mapping semi structured data to XML lists to the mapping of spreadsheet data, Jamshidi teaches a method of binding and importing data objects from different data sources to spreadsheet data stored in XML format using a Graphical User Interface (Col. 2, l. 22-60). Both Shadmon and Jamshidi teach mapping payload data to XML. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of importing data objects to spreadsheet data disclosed by Jamshidi, with the methods of mapping semi structured data by determining paths from the root of the XML tree rather than using a schema taught by Shadmon, since the indexing method taught by Shadmon would allow the importing of semi structured data to the spreadsheet without the requirement for a schema, thereby providing a desirable improvement by allowing faster processing and search of the data, without requiring the user to update a schema (Shadmon, Col. 8, l. 65-Col. 9, l. 16).

Regarding dependent claim 11, Shadmon teaches that the indexing unit determines at least one parent path from at least one field path associated with the payload data, and designating a bottom path from the parent path where the bottom path includes a longest path of the parent path (Col. 16, l. 58-Col. 17, l. 36; Col. 19, l. 41-Col. 20, l. 65), since Shadmon teaches the indexing of the semi structured data by path, and that multiple path configurations can be designated and searched. In other words, Shadmon teaches representing semi structured XML data as a tree, and traversing the tree to determine a parent path and the longest path of the parent path, thereby generating the set of leaves or nodes of the tree which are located at the ends of each longest path, i.e., the bottom path, where the leaves or nodes represent the data items (Col. 20, l. 24-60; Col. 24, l. 3-55).

Regarding dependent claim 12, while Shadmon teaches determining a parent path and designating a bottom path thereby enabling extracting and indexing of semi structured data, Shadmon does not explicitly teach mapping a node to a row of a spreadsheet list, however, Jamshidi teaches designating at least one bind node from the full path, i.e., bottom or longest path (Col. 7, l. 20-32; Col. 6, l. 3-31). While Shadmon does not explicitly teach mapping the bind node to a row in a spreadsheet list, Jamshidi teaches mapping the bind node to a row in a spreadsheet list (Col. 7, l. 20-32; Col. 6, l. 3-31), since Jamshidi teaches mapping a node to columns and it would have been obvious that the data could also be mapped to spreadsheet rows, since spreadsheets are composed of both rows and columns which are similarly designated. Further, it would have been obvious that the indexing unit would obtain values for a

plurality of fields using the bottom path, since Jamshidi teaches mapping the nodes to columns where the columns contain a plurality of fields, and Fig. 4 depicts mapping a plurality of fields to a column.

Both Shadmon and Jamshidi teach mapping payload data to XML. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of importing data objects to spreadsheet data disclosed by Jamshidi, with the methods of mapping semi structured data by determining paths from the root of the XML tree rather than using a schema taught by Shadmon, since the indexing method taught by Shadmon would allow the importing of semi structured data to the spreadsheet without the requirement for a schema, thereby providing a desirable improvement by allowing faster processing and search of the data, without requiring the user to update a schema (Shadmon, Col. 8, I. 65-Col. 9, I. 16).

Regarding dependent claim 13, Shadmon teaches that generating a set of parent paths for the at least one path comprises enumerating at least one path of data, following the path at least one path back to a previous field, and inserting a path associated with the previous field into the set of parent paths, since Shadmon teaches a method of path based query predicates for semi structured data which allow the enumerating of data paths at every level using path expressions (Col. 24, I. 3-55) thus allowing the enumeration and insertion of paths into the set of parent paths.

Regarding dependent claim 14, Shadmon teaches designating a Smart Path, an alternative path designated as a bottom path if more than one path qualifies (Col. 21, I. 24-36; Fig. 11). Shadmon also teaches token encoding so that fewer paths have to

be searched, thus allowing the designation of a longest path as the bottom path (Col.

22, l. 31-55).

Regarding independent claim 15 and dependent claims 16-19, claims 15-19

reflect the computer readable medium comprising computer executable instructions

used for implementing the methods of mapping payload data to spreadsheet lists

claimed in claims 10-14, and are rejected along the same rationale.

Conclusion

This Office action has an attached requirement for information under 37 CFR

1.105. A complete reply to this Office action must include a complete reply to the

attached requirement for information. The time period for reply to the attached

requirement coincides with the time period for reply to this Office action.
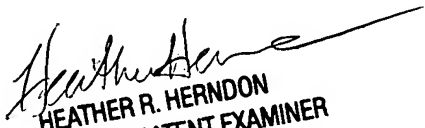
Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Amelia Rutledge whose telephone number is 571-272-

7508. The examiner can normally be reached on Monday - Friday 9:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

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